

**RTIP ID#** *(required)* 35556

**Project Description** *(clearly describe project)*: below is the project description as shown in the current 2011 FTIP Amendment # 30 (see attachment)

“IN THE CITY OF VICTORVILLE FROM 0.5 MILES NORTH OF MOJAVE DRIVE TO 1.5 MILES NORTH OF EXISTING STODDARD WELLS ROAD WELLS OVERCROSSING. RECONSTRUCT D/E/STODDARD WELLS RD IC'S. WIDEN BRIDGES (NO NEW LANES). CONSTRUCT NEW COLLECTOR DISTRIBUTOR RD OVER D/E/AND BNSF RR TO PARRALLEL I-15 NB INCLUDES ITS OWN BRIDGE. RECONST/REALIGN EAST/ WEST FRONTAGE RDS. CONST NEW AUX LN. (REFER TO MODELING DETAILS) (CA061) “

The proposed project is located on Interstate15 (I-15) between PM 42.5 to PM 46.0 within the City of Victorville This project two suggested alternative: “No-Build” alternative and a preferred Build alternative. The existing facility (I -15) consists of 3 non-standard mixed flow lanes (less than 12 feet wide) and non standard shoulders less than 10 feet) in both direction. Connected to the mainline are nonstandard “D”, “E” Street and Stoddard Wells Road Interchanges (IC).

Caltrans assigned to this proposed project ID # EA 355560. This segment of mainline (I-15) freeway and connecting Interchange ramps do not meet the current Caltrans roadway standards. Apart from steep gradient on SB direction, the existing insufficient weave and merge lengths and short acceleration and de-acceleration lanes on ramps has over time with increase demand has caused inefficient freeway operation and safety issues besides, reduction in speed and severe congestion and delays both on mainline. And the local streets. In order to overcome the impeding factors such as slow moving heavy trucks, climbing the steep upgrade, reduced speed and congestion, it was decided to upgrade the roadway in this segment of mainline and reconfigure connecting ramps at the specific interchanges by realigning and providing longer ramps lengths and larger turning radii on loop ramps and provide separate mixing lanes ( Auxiliary and collector /distributors).

One of the major elements of the proposed project scope of work is “D”, “E” Street and Stoddard Wells Road interchanges reconfiguration. The other minor project elements included are, short length collector distributor , auxiliary lane 2900 feet length ( between SB entrance ramp of Stoddard Wells Road and SB exit ramp of “D” Street), new west frontage road which connecting Stoddard Wells Road with “E” Street.( *see layout drawings attached*) The widening of the mainline would accomplish to bring freeway lanes and shoulders to current Caltrans roadway standards and also to provide 23 feet wide median in the center for future lanes. Simultaneously the Mojave River bridge would be widened along with widening of Victorville separation and overhead Bridge structures to accommodate future lanes. But for the proposed project no additional lanes are provided to the mainline

A west frontage road is planned for this project that would connect Stoddard Wells Road to the “E” Street. A common SB ON-ramp is also planned at west Frontage Road south of Stoddard Wells Road IC. This relocated SB On-ramp replace the existing “E” Street SB which would be eventually be eliminated. Collector /distributor road (2200 feet or 0.4 mile approximately) on the east side of I-15 is provided in the project design to facilitate missing (merge and weave) of exiting and entering vehicles traffic without interfering with the mainline traffic. Likewise an auxiliary lane (0.3 mile length approximately) lane on the west side is provide between SB entrance ramp of Stoddard Wells Road and exit ramp of SB “D” Street .

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

<b>Type of Project</b> <i>(use Table 1 on instruction sheet)</i>				
RECONFIGURE EXISTING INTERCHANGES				
<b>County</b> SAN BERNARDINO	<b>Narrative Location/Route &amp; Post-Miles:</b> SBd /15/PM 42.5 —46.0  <b>Caltrans Projects – EA#</b> 355560			
<b>Lead Agency:</b> CALTRANS				
<b>Contact Person</b> Tony Louka	<b>Phone#</b> 909-383-6385	<b>Fax#</b> 909-383-6494	<b>Email</b> <a href="mailto:Tony_louka@dot.ca.gov">Tony_louka@dot.ca.gov</a>	
<b>Hot Spot Pollutant of Concern</b> <i>(check one or both)</i> PM2.5 <b>PM10 X</b>				
<b>Federal Action for which Project-Level PM Conformity is Needed</b> <i>(check appropriate box)</i>				
	<b>EA or Draft EIS</b>	<b>X</b>	<b>FONSI or Final EIS</b>	<b>PS&amp;E or Construction</b>
<b>Other</b>				
<b>Scheduled Date of Federal Action:</b>				
<b>Current Programming Dates</b> <i>as appropriate</i>				
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>
<b>Start</b>	6/30/2008			8/21/14
<b>End</b>	12-13-2013	12/3/2013	RTL 4/16/2014	3/24/17

**Project Purpose and Need (Summary):** *(attach additional sheets as necessary)*

#

The Purpose and Need for the Interchange Reconstruction, was developed in cooperation with the FHWA. The purpose of the project is to upgrade the facility to meet current standards and improve operational characteristics that contribute to safety problems and operational inefficiencies. Three general purpose objectives were adopted by the project development team to assess the viability of alternatives in fulfilling the projects

- Upgrade interim non-standard roadway features to current highway standards as much as practical;
- Improve operational characteristics of the “D” Street, “E” Street, and Stoddard Wells Road interchanges that address accident concentrations and operational inefficiencies;
- Enhance safety by improving the operational characteristics of the interchanges.

Traffic data for existing facility (mainline and interchanges) within the project limits are shown in appropriate cells below for existing year **2012** ; year open to traffic is **2017** and the Design/horizon year is **2037**.

**Traffic Data**

Existing year 2012

AADT = 85,000 vpd; Peak Hour Volume = 4,480; DHV = 7,550; Truck % in ADT 17%; **LOS =C**

Please see attached Caltrans Traffic Memo dated October 17, 2012 for Forecasted Traffic data for the project

**I-15 Mainline (North of Mojave Dr. IC to D Street IC):**

Traffic Data Information					
PM 42.9/43.14	Year 2012 (existing)	Year 2017 (opening year)		Year 2037* (20-year)	
		No Build	Build	No Build	Build
Annual Average Daily Traffic (AADT)	85,500	93,000	93,000	129,900	129,900
Design Hour Volume (DHV)	7,550	8,160	8,160	11,200	11,200
Peak Hour Volume (PHV)	4,480	4,840	4,840	6,720	6,720
Truck % in ADT	17%	17%	17%	15%	15%
Truck % in DHV	9%	9%	9%	8%	8%
Directional Split (DS)	59%	59%	59%	59%	59%
Level of Service (LOS)	C	D	D	D	D

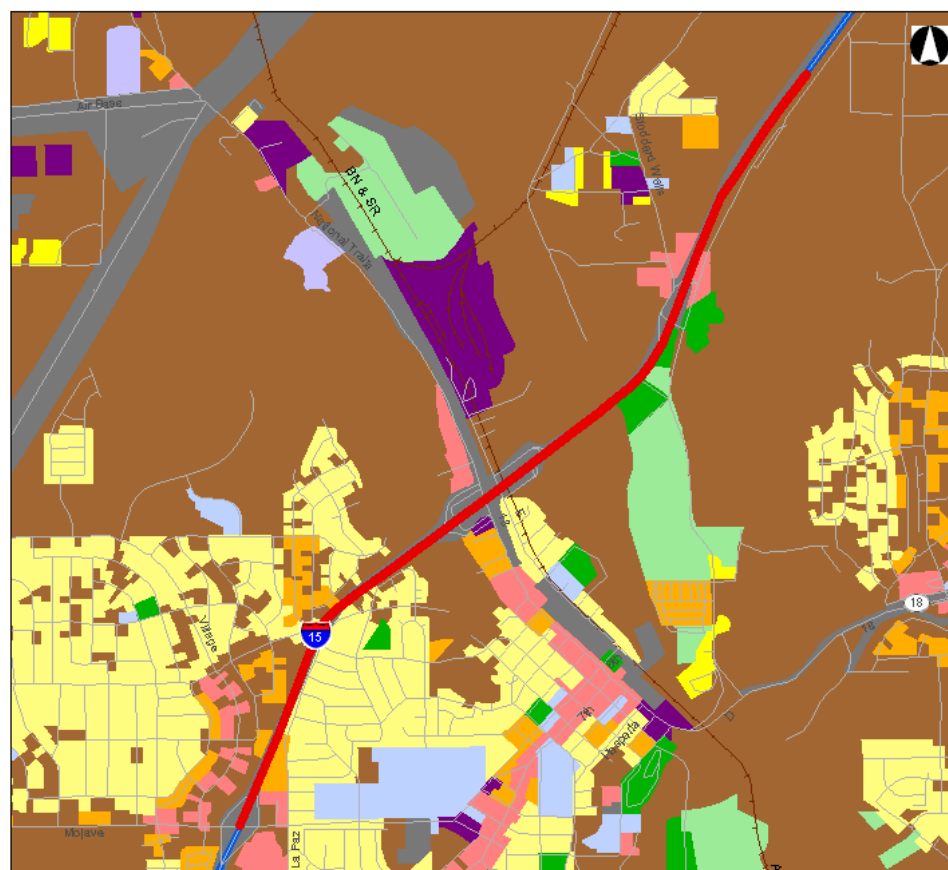
\*Planned SCAG RTP 6MF/2 HOV

NOTE: For more traffic data please see the last page of the PM Summary Form

### Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The City's General Plan Land Use Map identifies the areas within the project study area adjacent to I-15 and within the project limit is primarily urbanized consisting of residential, general commercial and light industrial uses.

As shown in the Figure below "Existing Land Use", the project area encompasses a 3.5 mile-long section of I-15, located within the northeastern limits of the City of Victorville, in San Bernardino County. The area, in general, is dominated by both light and heavy industrial uses, such as a large cement plant (CEMEX), material recycling centers, and several small automotive repair type businesses. Typical highway-related uses, such as motels and diners, are also established in the area. The residential areas, mostly to the east of I-15 include multi-family units north of Mojave Drive and single-family residences near E Street. To the west of I-15, a few residential areas are found near Mojave Drive. A mobile home Park exists near the northbound I-15 off-ramp at D Street. The nearest school is located along E Street, roughly 0.5 miles east of the project boundary. Eva Dell park is adjacent to the school. Along D Street, going east is the town center and a variety of retail establishments. An Amtrak station is also located in this area.



Sources: U.S. Census Bureau TIGER Data, 2000; ESRI Streetmap USA, 2006; SANBAG, 2000

0 0.15 0.3 0.6 0.9 1.2 Miles

#### Legend

- |  |   |
|--|---|
| <span style="color: red;">—</span> Proposed Project Area                 | <span style="color: green;">■</span> Open Space & Recreation                |
| <span style="color: lightgreen;">■</span> Agriculture                    | <span style="color: lightblue;">■</span> Public Facilities and Institutions |
| <span style="color: pink;">■</span> Commercial                           | <span style="color: yellow;">■</span> Rural Density Residential             |
| <span style="color: purple;">■</span> Extraction                         | <span style="color: grey;">■</span> Transportation and Utilities            |
| <span style="color: brown;">■</span> Industrial                          | <span style="color: tan;">■</span> Vacant                                   |
| <span style="color: yellow;">■</span> Low Density Residential            | <span style="color: blue;">■</span> Water & Floodways                       |
| <span style="color: orange;">■</span> Medium to High Density Residential |   |

**Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**

**I-15 Mainline ( North of Mojave Drive IC to D St. IC)**

**No-build Condition (2017)**

Mainline (I-15) AADT at D Street IC = 93,000 vpd; LOS=D; Truck Vol. in AADT=15,810 vpd; truck % in AADT =17%

**Build Condition (2017)**

Mainline (I-15) AADT at D Street IC = 93,000 vpd; LOS= D; Truck Vol. in AADT=15,810 vpd; truck % in AADT =17%

**I-15 Mainline ( D St. IC to north of Stoddard Wells Road IC))**

**No-build Condition (2017)**

Mainline (I-15) AADT at D Street IC = 69,400 vpd; LOS= C; Truck Vol. in AADT=15,962 vpd; truck % in AADT =23%

**Build Condition (2017)**

Mainline (I-15) AADT at D Street IC = 69,400 vpd; LOS= C; Truck Vol. in AADT= 15,962 vpd; truck % in AADT =23%

( Note: Traffic volume for Build and No- build condition is the same per traffic analysis Study)

**RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**

**I-15 Mainline ( North of Mojave Drive IC to D St. IC)**

**Build Condition (2037)**

Mainline (I-15) AADT at D Street IC = 129,000 vpd; LOS = D.; Truck Vol. in AADT=19,350 vpd; truck % in AADT =15%

**No-Build Condition (2037)**

Mainline (I-15) AADT at D Street IC = 129,000 vpd; LOS =D.; Truck Vol. in AADT=19,350 vpd; truck % in AADT =15%

**I-15 Mainline ( D St. IC to north of Stoddard Wells Road IC))**

**Build Condition (2037)**

Mainline (I-15) AADT at D Street IC = 100,500 vpd; LOS = D.; Truck Vol. in AADT= 22,110 vpd; truck % in AADT =22%

**No-Build Condition (2037)**

Mainline (I-15) AADT at D Street IC = 100,500 vpd; LOS = D Truck Vol. in AADT=22,110 vpd; truck % in AADT =22%

( Note: there is no change in traffic volume for Build and No- build condition per Traffic analysis study)

See other traffic data Tables given on the attached Caltrans traffic memo

**Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT. Yes the part of the project is interchange re-configuration work**

For local Street traffic analysis assumed same traffic volumes for both Build and No-Build condition truck % in ADT is 2% at peak hour. For No- build condition at opening year (2017) at P.M. hour NB and SB “D” Street ramps would operate at LOS of B and C, while SB Stoddard Wells Road ramp would operate at LOS of “B”. But with Build condition BN and SB a “D” Street ramps would have LOS of A and B respectively while Stoddard Wells Road ramp would operate at LOS of B..

### Build Condition (2017)

D Street;	AADT = 27,600;	% Trucks = 2%	; Truck Vol. = 552	; LOS = A
E Street :	AADT = 820;	% Trucks = 2%	; Tuck Vol. = 16	; LOS = A
Stoddard Road	AADT = 3,300;	% Trucks = 2%	; Truck Vol. = 66	; LOS = B
E. Frontage Rd.	AADT = 630;	% Trucks = 2%	; Truck Vol. = 13	; LOS = A

### No-Build Condition (2017)

D Street;	AADT = 27,600;	% Trucks = 2%	; Truck Vol. = 5520	; LOS = B
E Street :	AADT = 820;	% Trucks = 2%	; Truck Vol. = 16	; LOS = A
Stoddard Road	AADT = 3,300;	% Trucks = 2%	; Truck Vol. = 66	; LOS = C
E. Frontage Rd.	AADT = 630;	% Trucks = 2%	; Truck Vol. = 13	; LOS = A

**RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

For local Street traffic analysis assumed same traffic volumes for both Build and No-Build condition. The truck % in ADT is 2% at peak hour. For No- build condition at horizon year (2037) at A.M. Hour all “D” Street ramps and SB Stoddard Wells Road ramp would operate at LOS of “F”. But with Build condition all “D” Street ramps is and Stoddard Wells Road would operate at LOS of C and D respectively

### Build Condition (2037)

D Street;	AADT = 35500;	% Trucks = 2%	; Truck Vol. = 710	; LOS = A
E Street :	AADT = 760	% Trucks = 2%	; Truck Vol. = 15	; LOS = A
Stoddard Road	AADT = 7,500;	% Trucks = 2%	; Truck Vol. = 150	; LOS = D/C
E. Frontage Rd	AADT = 960;	% Trucks = 2%	; Truck Vol. = 12	; LOS = A

### No-Build Condition (2037)

D Street;	AADT = 35,500;	% Trucks = 2%	; Truck Vol. = 710	; LOS = B
E Street :	AADT = 760;	% Trucks = 2%	; Truck Vol. = 15	; LOS = A
Stoddard Road	AADT = 7,500;	% Trucks = 2%	; Truck Vol. = 150	; LOS = F/F
E. Frontage Rd	AADT = 960;	% Trucks = 2%	; Truck Vol. = 12	; LOS = A

**Describe potential traffic redistribution effects of congestion relief** *(impact on other facilities)*

In accordance with San Bernardino and Riverside Counties Congestion Management plans (CMP), the I-15 route concept is level of service (LOS) “E” for the urbanized portion of the route. In the rural areas, the route concept is LOS of “C” and in the transition areas where the route changes from rural to urban; the concept is “D”. LOS E is the level of service in 2025 route concept adopted by Caltrans District 8 for the segment of I-15 affected by this project. The City of Victorville’s target for peak hour intersection operation is LOS E or better and the threshold of significance occurs when the addition of project generated trips causes an intersection, operating at LOS E or better, to operate at LOS F. The LOS performance for freeway operations and ramp/ Local Street shall be considered deficient in 2037 if it operates lower than LOS E. The heaviest traveled segment of I-15 within the project study area is between Mojave Drive IC and D and E Street IC. For “No- build” condition in design year 2030 the LOS is F between D and E Street IC but with project implementation the LOS is C/D. The SR-18 which is also “D” Street within the project area would be relocated to connect with the planned future new SR-18 Interchange located north of Stoddard Wells Road IC along I-15. The relocation of SR-18, which would remove SR-18 traffic load from “D” street, which currently is serving the traffic from Highway-18. This redistribution of traffic would further ease up congestion and delays on segment of I-15 and the three interchanges within the proposed project limits. The LOS of each individual ramps at “D”, “E” Street and Stoddard Wells Road is shown in the attached Caltrans Traffic Memo dated October 17, 2012



**Comments/Explanation/Details** (attach additional sheets as necessary)

USEPA 's in the Appendix "A" of their *Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Area (March 29, 2006)* has given examples of project most likely to be **project of air quality concern** as specified in final rule 40 CFR 93.123(b)(1). We have discussed each example below and ascertained if the proposed project identifies with any of the given criterion (example). These examples are extracted verbatim from the Appendix A of PM Guidance for Project of Air Quality Concern (POAQC)

- A project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic;  
**Response:** This is not a new highway but an existing facility with no AADT change in horizon year (2037) for No-Build and Build condition.
- New exit ramps and other highway facility improvements to connect a highway or expressway to a major freight, bus, or intermodal terminal;  
**Response:** the project is not suggesting new ramps to connect the freight or buses terminal to. Existing highway, but to reconfiguring the existing interchanges (IC) to accommodate the demand and to upgrade IC to current highway standards. The three IC "D", "E" Street and Stoddard Wells Road Interchange with ramps already exist. Except for exiting southbound ramp that would be eliminated and replaced with an exit and entrance ramp at west frontage road .( see attached layout plan)
- Expansion of an existing highway or other facility that affects a congested intersection (operated at Level-of-Service D, E, or F) that has a significant increase in the number of diesel trucks; and,  
**Response:** The configuration/ reconstruction of "D", Street and Stoddard Well interchanges would improve LOS from "F" to D in horizon year and would not degrade the existing level of service of the ramps intersections ( see attached Traffic analysis)
- Similar highway projects that involve a significant increase in the number of diesel transit busses and/or diesel trucks.  
**Response:** The horizon year (2037) AADT for Build and No -Build condition is 129,000 vpd; No increase in traffic volume; in horizon year. On the contrary it is forecasted that the percentage truck in AADT in the opening year would decreases from 17% to 15% in the horizon year. A significant decline in truck volume rather than increase. The proposed project would not increase in the number of diesel trucks volumes as can be seen from the attached traffic analysis. The traffic volumes remain the same for No-Build and Build condition after the project construction both at opening and horizon years. No significant increase in Truck traffic volumes by the project

Major element of the proposed project scope of work is interchange reconfiguration but also include other project elements , short length collector distributor Road, West frontage road and auxiliary lane (2900 feet). Such project elements fall under one of the category of projects that are Not POAQC per Examples given in Appendix "A" of PM Guidance and these are reproduced below for reference. This project elements falls under category of projects at bullet # 2 and 3. The auxiliary lane and collector distributor and west frontage road would improve freeway operation and increase speed and also improve merge and weave operation and reduce accidents, congestion/delay and thereby would cut emissions and impact to local air quality. This project, however, would not increase diesel truck percent or volume. The percentage of trucks traffic volume in traffic AADT would decline in future . The AADT remains the same for Build and No-Build condition (see traffic memo attached)

- Any new or expanded highway project that primarily services gasoline vehicle traffic (i.e., does not involve a significant number or increase in the number of diesel vehicles), including such projects involving congested intersections operating at Level-of-Service D, E, or F;
- An intersection channelization project or interchange configuration project that involves either turn lanes or slots, or lanes or movements that are physically separated. These kinds of projects improve freeway operations by smoothing traffic flow and vehicle speeds by improving weave and merge operations, which would not be expected to create or worsen PM<sub>2.5</sub> or PM<sub>10</sub> violations; and,
- Intersection channelization projects, traffic circles or roundabouts, intersection signalization projects at individual intersections, and interchange reconfiguration projects that are designed to improve traffic flow and vehicle speeds, and do not involve any increases in idling. Thus, they would be expected to have a neutral or positive influence on PM<sub>2.5</sub> or PM<sub>10</sub> emissions

It is determined from above discussion that the proposed project is not POAQC as it does not meet the criteria identified in 40 CFR §93.123(b)(1). However, requirements of 40 CFR § 93.116 applies on all FHWA/FTA projects at all times which states that federal projects must not create new localized CO, and PM (PM<sub>2.5</sub> or PM<sub>10</sub>) violation or increase frequency and severity of any existing CO and PM violation. This criterion is satisfied without a hot spot analysis in PM<sub>2.5</sub> or PM<sub>10</sub> in nonattainment and maintenance areas for project that is not a POAQC. NO hot -spot analysis is required

The proposed project has STIP funding. The project construction is scheduled to be completed by 3/24/2017 with RTL date of April 16, 2014. Begin construction is 8/21/2014 (The project should be completed by end of year 2018 at the latest as given in 2012 RTP Model List to avoid reevaluation of Conformity determination.)



Continued from page 3 (RTP Horizon year/Design Year)

**I-15 Mainline (D Street IC to north of Stoddard Wells Road IC):**

Traffic Data Information					
PM 43.14/45.65	Year 2012 (existing)	Year 2017 (opening year)		Year 2037* (20-year)	
		No Build	Build	No Build	Build
Annual Average Daily Traffic (AADT)	63,200	69,400	69,400	100,500	100,500
Design Hour Volume (DHV)	5,870	6,300	6,300	8,400	8,400
Peak Hour Volume (PHV)	3,460	3,720	3,720	4,960	4,960
Truck % in ADT	23%	23%	23%	22%	22%
Truck % in DHV	13%	13%	13%	12%	12%
Directional Split (DS)	59%	59%	59%	59%	59%
Level of Service (LOS)	C	C	C	D	D

**I-15 Mainline at SR 18 (D St.)/E St Road Interchange: (Build)**

Traffic Data Information - Build						
	Year 2012 (existing)		Year 2017 (opening year)		Year 2037 (20-year)	
	ADT	DHV	ADT	DHV	ADT	DHV
NB Off Ramp to SR 18 (D St.)	12,500	740	13,300	880	16,500	1,740
NB Off Ramp to E St.	1,030	50	1,100	60	1,400	110
NB On Ramp from SR 18 (D St.)	1,860	120	2,000	140	2,500	290
NB On Ramp from E St.	360	50	390	60	510	110
SB Off Ramp to SR 18 (D St.)	1,960	140	2,100	150	2,700	190
SB Off Ramp to E St.	390	10	N/A	N/A	N/A	N/A
SB On Ramp from SR 18 (D St.)	13,200	840	15,100	980	19,200	1,460
SB On Ramp from E St.	1,020	50	N/A	N/A	N/A	N/A
New West Frontage Rd./E Street	N/A	N/A	410	14	490	34

**Local Streets:**

Traffic Data Information						
	Year 2012 (existing)		Year 2017 (opening. year)		Year 2037 (20-year)	
	ADT	DHV	ADT	DHV	ADT	DHV
<b>Stoddard Wells Road west of Interstate 15</b>	2,600	220	3,300	440	7,500	660
<b>East Frontage Rd.</b>	570	80	630	89	960	140
<b>D Street (East of I-15)</b>	25,900	1,990	27,600	2,110	35,500	2,680
<b>E Street (East of I-15)</b>	790	90	820	90	760	90

**I-15 Mainline at Frontage Road/Stoddard Wells Road Interchange: (No Build)**

Traffic Data Information – No Build						
	Year 2012 (existing)		Year 2017		Year 2037 (20-year)	
	ADT	DHV	ADT	DHV	ADT	DHV
<b>NB Off Ramp to Frontage Rd.</b>	2,000	400	2,250	440	3,100	660
<b>NB On Ramp from Frontage Rd.</b>	930	60	1,000	70	1,400	100
<b>SB Off Ramp to Stoddard Wells</b>	1,300	100	1,500	110	2,000	170
<b>SB On Ramp from Stoddard Wells</b>	2,600	440	2,800	490	3,900	730